

by which these various color varieties were originally produced. The original character was compound and the new variety was produced by the loss of one or more of the components. In other words these varieties are retrogressive. Beginning, for instance, with a purple mottled bean, one variety was formed by the loss of the mottling, another by the loss of the pigment, and another by the loss of the pigment-changer. Then by hybridization every possible combination of these three characters became the constant characteristics of distinct strains. When these varieties are crossed together the original variety may be reproduced by bringing together the several component parts of the original compound character.

There are still many mysteries regarding latent characters or qualities, but I believe the considerations here presented bring a large number of otherwise anomalous phenomena into perfect harmony with typical Mendelian cases of alternative inheritance. It appears to me certain that this conception of latent characters as *invisible* ones, which has already been used by Correns<sup>14</sup> to interpret in part the behavior of *Mirabilis* hybrids, can be extended to clear up his remaining difficulties, and that Bateson will find in the same conception an explanation of the complex behavior of his sweet peas and stocks without resort to the inexplicable synthesis and resolution of supposed hypallelomorphs.

GEORGE HARRISON SHULL  
STATION FOR EXPERIMENTAL EVOLUTION,  
COLD SPRING HARBOR, LONG ISLAND,  
December, 1905

#### QUOTATIONS

##### THE UNIVERSITY OF OXFORD

THIS appeal is now made on behalf of Oxford by the Chancellor and Vice-Chancellor of that University, and it is to be enforced at a public meeting of all persons interested in the subject to be held in London on Thursday, May 16, with the Chancellor of the University

<sup>14</sup>Correns, C., 'Zur Kenntniss der scheinbar neuen Merkmale der Bastarde. Zweite Mittheilung über Bastardirungsversuche mit *Mirabilis* Sippen,' *Ber. d. d. Bot. Ges.*, 23: 70-85, 1905.

in the chair, supported by many men of light and leading from among those whom the University has already trained for the high station they adorn in Church and State. The appeal, however, is not made to old Oxford men alone; it is addressed to "all who are interested in the continued wellbeing and usefulness of the oldest University in the Empire." Nor is it in its present form and purpose an appeal for the complete equipment of the University with all the appliances, institutions, and endowments which would enable Oxford to hold her own in the coming time among the leaders in all departments of letters, learning, science, and the arts. That is an ideal which would require millions for its effective and practical realization. Cambridge has already asked for something like a million and a half and could probably find plenty of use for as much again. American Universities are almost daily being endowed on this hitherto unprecedented but by no means extravagant scale. Oxford is, for the present, less ambitious and perhaps more practical. She recognizes that even for Universities it is true that *non omnia possumus omnes*. The days are gone by, perhaps, when any University, even a multi-millionaire University, can profitably do as Bacon did when he aspired to take all knowledge for his province. Hence such new endowments as Oxford now hopes to obtain—£250,000 is all that is asked for at present, merely a paltry million dollars as American founders and benefactors might regard it—are to be directed into certain definite channels. Largely at the instance of Mr. T. A. Brassey, who has already set a goodly example by his active exertions and personal munificence, a scheme has been prepared which had received the hearty approval of the late Chancellor, Lord Goschen, before his death, and is supported by many high academical authorities and by a number of old Oxford men of the highest capacity and experience in many walks of life. An outline of this scheme will be found in the letter of the Chancellor and Vice-Chancellor. It includes provision for the promotion of modern studies, literary and scientific, such as modern languages, electrical research, the scientific basis of the training of

practical engineers, the study of hygiene and of scientific agriculture, and, last but not least, for the adequate equipment and endowment of that greatest of Oxford's academical institutions, the ancient and world-renowned library of Thomas Bodley's foundation.—*The London Times*.

#### CURRENT NOTES ON LAND FORMS

##### NARROW COASTAL PLAINS

WELL-DEFINED land forms have an importance in systematic physiography that is not yet fully enough recognized by travellers. Hence all the more satisfaction is felt when an article gives so definite an account of such a feature as a narrow coastal plain that it can be easily appreciated by the reader. Such is the case in the 'Notes on the Raised Beaches of Taltal (Northern Chile),' by O. H. Evans (*Quart. Journ. Geol. Soc.*, LXIII., 1907, 64-68).

The coastal plain at Taltal has a gently inclined surface, fringing the coastal ranges and extending up the broader valleys to a considerable altitude and distance from the present shore. There is local variation in the width of the plain, and in the altitude of its inner border (200 feet, back of Taltal) along the base of the mountains. The surface of the plain is thinly covered with angular fragments from the hills; but where sections reveal its structure, it is seen to consist of stratified sand and gravel, containing recent shells which are sometimes plentiful enough to form distinct beds. Here and there the subjacent rocks rise through the plain in curiously weathered remnants of former islets and stacks. Evidence of intermittent uplift is found in several terraces, three of which are relatively well defined at altitudes of about 15, 80 and 200 feet above sea-level; two more obscure terraces are seen at intermediate heights. Where the mountains approach the sea and the plain narrows, the terraces are replaced by lines of boulders; at other points a rock shelf and again a series of shallow caverns marks the former shore line. Sudden uplifts are inferred from the well-preserved condition of the shells. Although no explicit statement is made as to the relation of the larger in-

land valleys to the plain, it may be inferred from certain phrases that the valley floors are now well opened somewhat below the plain surface. Regarding the smaller ravines of the old-land hills, it is said that their beds "suddenly alter in inclination and become precipitous as they approach the sea. Were streams suddenly to start running in these old gorges, they would terminate in waterfalls." Whether this sudden steepening is at the former or at the present shore line, does not clearly appear.

Another narrow coastal plain is described by W. D. Smith as forming an interrupted rim around the mountainous island of Cebu, and containing nine tenths of its large population ('Contributions to the Physiography of the Philippine Islands: I., Cebu Island,' *Philippine Journ. Sci.*, I., 1906, 1043-1059). The basis of the plain is of coral rock, over which alluvial deposits have been spread by the streams and rivers from the interior valleys.

Brief description of what appears to be a small and undissected coastal plain on which Sidon is situated on the Mediterranean border of Palestine, is given by Libbey and Hoskins in their account of a journey to 'The Jordan valley and Petra' (2 vols., New York, Putnam's, 1905). Its low and well-watered surface has a 'carpet of green' in strong contrast to the gray foot-hills which rise from its inner border. A similar coastal or littoral plain extends southward from the hills by Beirut (see p. 66, frontispiece, and plate on p. 41).

I. B. AND W. M. D.

##### GLACIAL TROUGHS AND HANGING LATERAL VALLEYS

IN view of the ever-increasing volume of evidence to the effect that every glaciated mountain range in the world thus far studied shows a systematic association of peculiar features, such as valley-head cirques often holding rock-basin tarns, over-deepened main-valley troughs with floors of a considerable width, hanging lateral valleys, and Piedmont morainic amphitheatres, it is interesting to scrutinize the statements of certain geologists who still maintain that glaciers are ineffect-